#### Economic Impact of PA 93 of 2007 on Supply Chain Activities in Michigan **Initial Draft**

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#### Outline

- Background
- Research questions
- Methodology
- Results
- Conclusions
- Recommendations

# Sources of Information

- Business census data
- U.S. Census, Censtats, 2005 Business Patterns for the State of Michigan
- Interviews
- Surveys

#### Sources of Information Interviews

- Michigan manufacturers and shippers
- Michigan contract warehouse providers
- Parcel couriers
- Michigan Department of Treasury

#### Sources of Information Survey

- graduate students -November 2007 Completed by MSU and GVSU faculty and
- Sample contents
- Warehouse services operators Members and non-members provided by International Warehouse and Logistics Association
- Courier services Provided by International faculty contacts Warehouse and Logistics Association and
- Consulting services

#### Background

- Public Act 93 of 2007 was passed by the Michigan legislature and signed by the Governor on September 30, 2007.
- The act provides for a six percent tax on certain services and takes effect on December 1, 2007.
- The act was part of an initiative to increase state revenues and cut spending to cover an expected \$1.6 billion state deficit during the fiscal year beginning October 1, 2007.
- Total revenues associated with the new tax on services was estimated at \$613.8 million by the Senate Fiscal Agency for the final ten months of the 2008 fiscal year. Some business groups feel that this estimate understates potential revenue
- management activities and, as a minimum, includes: The new six percent tax applies to certain types of supply chain
- Courier and messenger services
- Consulting services including physical distribution and logistics consulting
- Warehousing and storage activities

## Background NAICS Code and Services

- the U.S. Office of Management and Budget. North American Industry Classification System (NAICS) produced by The description of listed services is based on the 2002 Edition of the
- accordance with the major activity conducted at that location. This information is used by the U.S. Census to compile information regarding employees and payroll for the different industry groups. Every business establishment in North America is classified in
- An establishment is a single physical location at which business is conducted or services or industrial operations are performed. It is consist of one or more establishments. not necessarily identical with a company or enterprise, which may
- PA 93 specifies that the service is subject to tax based on the description of the service in the applicable NAICS code and not the classification of the establishment providing the service

## Background NAICS Code and Services

- description in the applicable NAICS Code. Supply chain management (SCM) related services follows: The act specifies that services are subject to taxation based on their
- Courier and messenger services, as described in NAICS subsector code 492
- Consulting services, as described in NAICS subsector code 5416
- Warehousing and storage services, as described in NAICS subsector code 4931
- business, the Use Tax Act specifically provides that service transactions are subject to the use tax based on the description of that service in the applicable NAICS Code and not on the public warehouse in an establishment that is classified as a trucking company would be subject to taxation. classification of the establishment providing the service. Thus, a It is important to understand that while the NAICS classifies

#### Background Use Taxes

- services for the privilege of using that service in Michigan services are subject to a 6 percent use tax imposed on the purchaser or consumer of In Michigan, certain goods are subject to the 6 percent sales tax while certain
- purchaser/consumer is not relieved of the responsibility for the tax until it has been percent use tax from the purchaser and remit it to the State of Michigan. The A simultaneous obligation is imposed on the seller of the service to collect the 6 paid to the State
- catalog sales of goods or services made or delivered over the internet or by phone and Michigan purchaser/consumer of their tax obligation. These situations often involve law from collecting Michigan's 6 percent use tax, but that does not relieve the In some situations, a seller located outside of Michigan may be excused by federal
- which taxable services are provided. In some instances, taxable and exempt be either fully taxable or fully exempt; an all or nothing tax results the predominate nature of the transaction must be determined. The transaction will property are combined into a single mixed transaction. When that situation occurs, Michigan's 6 percent use tax is applied to the purchase /sales price of a transaction in

### Supply Chain Management and the New Use Tax Background

- physical distribution and consulting services establishment would be responsible for the collection, from their customers, the new 6 percent tax and its remittance to the Michigan Department of Treasury. Warehousing and storage services, courier and messenger services, and
- such as consulting, security, janitorial, landscaping, and travel and payment of the service tax for a wide range of services provided to them In addition, these establishments would themselves be responsible for the reservation services
- the law could result in their inclusion. do not believe will be subject to the tax. However, certain interpretations of will be followed by a discussion of possible other SCM activities which we The following sections discuss, respectively, the three SCM categories. This
- It is also important to understand that PA 93 was approved in an emergency overnight legislative session on September 30 and was not available for relating to intent as well as assumptions used in developing revenue review or comment by interested parties. There are many questions

# Research Questions

- Which segments of supply chain industry will be impacted?
- What is the role of location in the application of the services tax?
- What is the responsibility of out-of-state providers in applying the tax?
- Will bundled services have to be taxed independently?
- What are the policies of neighboring states regarding SCM services taxes?
- and how will they likely respond? What is the magnitude of the industry being impacted

## Which Segments of Supply Chain Industry will be Impacted?

- Warehouse and storage services
- Courier and messenger services
- consulting Physical distribution and logistics

# Warehousing and Storage Services

- 4931" will be subject to the new tax on services. PA 93 states that "warehousing and storage services, as described in NAICS subsector code
- and fulfillment, packaging, pick and pack, price marking and ticketing, and transportation arrangement... However, establishments in this industry group always provide warehousing or storage services in addition to logistics services.. Furthermore, the warehousing and storage of goods must be more than incidental to establishments provide facilities to store goods. They do not sell the goods they handle. These establishments take responsibility for storing the goods and keeping them secure. They may also provide a range of services, often referred to as logistics services, related to the distribution of goods. Logistics services, can include labeling, breaking bulk, inventory control and management, light assembly, order entry 493. Warehousing and Storage. Industries in this sector are primarily engaged in operating warehousing and storage facilities for general merchandise, refrigerated goods, and other warehouse products. These the performance of the services, such as price marking.
- 4931. Warehousing and Storage. (no description provided)
- 49311. General Warehousing and Storage. This industry comprises establishments primarily engaged in operating merchandise warehousing and storage facilities. These establishments generally handle goods in containers, such as boxes, barrels, and/or drums, using equipment, such as forklifts, pallets, and racks. They are not specialized in handling bulk materials of any particular type, size, or quantity of goods or products.
- 49312. Refrigerated warehousing and storage. This industry comprises establishments primarily engaged in operating refrigerated warehousing and storage facilities. The services provided by these establishments include blast freezing, tempering, and modified atmosphere storage services.
- engaged in operating bulk farm product warehousing and storage facilities (except refrigerated). Grain elevators primarily engaged in storage are included in this industry. Storing grains and field beans (i.e., grain elevators) as an incidental activity to sales are <u>not</u> included in this industry. 49313. Farm Product Warehousing and Storage. This industry comprises establishments primarily
- 41319. Other Warehousing and Storage. This sub sector includes the following types of warehouse and storage facilities. Automobile dead storage, bonded warehouses, bulk petroleum storage, lumber storage terminals, public and private warehouses and whiskey warehousing

## Warehousing and Storage Services Assumptions and Issues

company using a Michigan warehouse would be required to pay the tax. A Michigan We assume that a purchaser of warehouse services will be taxed if the warehouse is company using an outstate warehouse would not be taxed. located in Michigan. The purchaser may be an instate or outstate entity. An outstate

#### I hus..

- Michigan warehouse providing services for a Michigan company.....
- Michigan warehouse providing services for an outstate company... ....Taxable
- Outstate warehouse providing services for a Michigan company.....

#### Issues.

- given in 493 whereas the law includes those activities in 4931 since that includes more activities. Logistics is only mentioned in the warehouse description service may be taxable. The law says that one can not go upwards in NAICS code numbers Logistics services provided by a warehouse company that are incidental to the warehouse
- storage, bonded warehouses, bulk petroleum storage, lumber storage terminals, and whiskey warehouses are included warehouses, some farm product warehouses and other warehouses including auto dead warehousing is included. Our analysis, based on the NAICS code, suggests that refrigerated The Michigan Department of Treasury web page seems to suggest that only merchandise

# Payroll and Use Taxes from Warehousing and Storage

- The following table provides estimates of use tax revenues for the warehousing and storage industry.
  This shows that the courier industry in Michigan….
- Has 13,738 employees
- An annual payroll of \$587 million
- Estimated sales of over \$1.4 billion
- Use tax revenues of about \$88 million annually
- Michigan income tax revenues of \$23 million annually
- The estimates are projected using U.S. Census employment and payroll data by NAICS code.

\$5.4	\$20.2	\$336.5	\$134.6	4,193	Other	49319
\$0.1	\$0.3	\$5.3	\$2.1	55	Farm Product	49313
\$0.6	\$2.3	\$39.0	\$15.6	369.	Refrigerated	49312
\$17.4	\$65.1	\$1,085.4	\$434.2	9,121	General	49311
\$23.5	\$88.0	\$1,466.3	\$586.5	13,738	Warehousing and storage	4931
Estimated 2007 Income Tax (\$M)	Estimated 2007 Use Tax (\$M)	Estimated 2007 Sales (\$M)	Estimated 2007 Payroll (\$M)	Michigan Employees	Description	NAICS

# Courier and Messenger Services

- code 492" will be subject to the new tax on services PA 93 states that "Courier and messenger services, as described in NAICS subsector
- 492. Couriers and messengers. Industries in the Couriers and Messengers subsector delivery establishments that, under contract to them, perform local pick-up and delivery. establishments also distinguishes these transportation services from local messenger and those in the transportation industries. The complete network of courier services equipment. Sorting and transportation activities, where necessary, are generally collection, pick-up, and delivery operations to be done with limited labor costs and minimal that can be handled by one person without using special equipment. This allows the provide intercity and/or local delivery of parcels. These articles may be described as those bicycle, foot, small truck, or van mechanized. The restriction to small parcels partly distinguishes these establishments from Messengers, which usually deliver within a metropolitan or single urban area, may use
- 4921. Couriers. This industry comprises establishments primarily engaged in providing air, surface, or combined courier delivery services of parcels generally between metropolitan areas or urban centers. The establishments of this industry form a network including courier local pick-up and delivery to serve
- 4922. Local messengers and delivery. This industry comprises establishments primarily engaged in providing local messenger and delivery services of small items within a single metropolitan area or within an urban center. These establishments generally provide point-to-point pick-up and delivery and do not operate as part of an intercity courier network.

#### NAICS Code 492 excludes:

- Truck transportation of palletized general freight
- Operating the U.S.Postal Service or providing postal services on a contract basis
- Providing the bulk transportation of mail on a contract basis to and from U.S. Postal Service establishments

# Courier and Messenger Services

- operations of companies such as FedEX, UPS, DHL and others. The NAICS description appears to clearly include the major air and ground express
- Who pays the tax?
- We assume that, under Section 20 sourcing rules, the Michigan purchaser of courier or messenger services will be taxed when that transaction occurs in Michigan.
- are purchased. Simply stated, a Michigan individual or company would pay the tax at the time the services
- the first point of contact with a courier service. The Michigan Department of Treasury has informally indicated that the tax would be paid at
- An inbound parcel to Michigan from an outstate origin would not be taxed.
- Intrastate and outbound interstate parcels would represent most of the tax.

# Payroll and Use Taxes from Courier Services

- The following table provides estimates of use tax revenues for the courier and messenger
- This shows that the courier industry in Michigan....
- Has 12,646 employees
- An annual payroll of \$424 million
- Estimated sales of over \$1 billion
- Use tax revenues of about \$64 million annually
- The estimates are projected using U.S. Census employment and payroll data by NAICS code.

NAICS Code	Description	Michigan Employees	Estimated 2007 Payroll (\$M)	Estimated 2007 Sales (\$M)	Estimated 2007 Use Tax (\$M)	Estimated 2007 Income Tax (\$M)
492	Couriers & messengers	12,646	\$424.0	\$1,060.7	\$63.6	\$17.0
4921	Couriers	11,959	\$406.2	\$1,101.6	\$60.9	\$16.3
4922	Local messengers	687	\$18.1	\$45.1	\$2.7	\$0.7

## Process, Physical Distribution and Logistics Consulting Services

- will be subject to the new tax on services PA 93 states that "Consulting services, as described in NAICS subsector code 5416"
- Services" and covers a broad range of consulting services NAICS code 5416 is titled "Management, Scientific and Technical Consulting
- NAICS code 541614 is a subsector of 5416 titled "Process, Physical Distribution and Logistics Consulting Services." It is described as follows:
- tariff information services, transportation management consulting and others inventory planning and control, logistics management, physical distribution, tariff rate and activities relating to: customs, efficiency management, freight rate auditing and consulting goods and materials; and (9) materials management and handling. It includes consulting networks; (7) warehouse use, operations and utilization; (8) transportation and shipment of operations improvement; (2) productivity improvement; (3) production planning and control; and assistance to businesses and other organizations in area, such as: (1) manufacturing (4) quality assurance and quality control; (5) inventory management; (6) distribution This U.S. industry comprises establishments primarily engaged in providing operating advice

## Process, Physical Distribution and Logistics Consulting Assumptions

- purchaser of the service is outside of Michigan. consulting firm doing work for an outstate client would not be taxed since the firm doing the work may be located inside or outside of Michigan. A Michigan We assume that a Michigan purchaser of SCM consulting services will be taxed.
- Thus...
- Michigan consultant doing work for Michigan client----
- Outstate consultant doing work for a Michigan client-----Taxable
- Michigan consultant doing work for an outstate client-----Not Taxable
- this category of services so our estimate, as well as Treasury's, may understate the tax revenue attributable to Issue. We believe that Michigan is a net importer of SCM related consulting services
- Impacts
- Michigan businesses will pay more for consulting services than similar businesses in other
- Competitive position in the short and long term will suffer.
- specialized services at less than in-house costs Michigan businesses from using consulting companies that can provide high quality Business is trending towards more specialization through outsourcing. This tax discourages

# Payroll and Use Taxes from Process, Physical Distribution and Logistics Consulting Services

- The following table provides estimates of use tax revenues for the Process, Physical Distribution and Logistics Consulting Services.
- This shows that the industry in Michigan....
- Has 3,843 employees
- An annual payroll of \$0.204 million
- Estimated sales of over \$0.501 billion
- Use tax revenues of about \$0.031 million annually
- The estimates are projected using U.S. Census employment and payroll data by NAICS code.

\$8.1	\$30.5	\$508.8	\$203.5	3,843	Process, PD & Logistics Consulting	541614
Estimated 2007 Income Tax (\$M)	Estimated 2007 Use Tax (\$M)	Estimated 2007 Sales (\$M)	Estimated 2007 Payroll (\$M)	Michigan Employees	Description	NAICS Code

# Are Logistics Services Included?

- There has been some indication that logistics services may be included in the new services tax.
- This is based on two possible theories that have been suggested informally by Department of reasury officials:
- Office Administrative Services (NAICS Code 5611) are subject to the new use tax and are described as
- such as financial planning; billings and recordkeeping; personnel; and physical distribution and logistics for others on a contract or fee basis. These establishments do not provide operating staff to carry out the complete operations of a "This industry comprises establishments primarily engaged in providing a range of day-to-day office administrative services,
- We do not believe that logistics services are subject to the tax under this NAICS Code
- An important caveat under the broad Administrative and Support category is that providing only one of the support services the transportation related categories not subject to taxation. service provided. Logistics services tend to be provided by firms specializing in that activity and would be classified in one of (e.g., accounting) that establishments in this industry provide require classification in the appropriate industry according to the
- The authors of the 2002 NAICS Code may have lacked an understanding of logistics given its inclusion with well defined office support services such as personnel and bookkeeping. This is supported by the fact that the new 2007 NAICS Code omits any reference to logistics services under Office Administrative Services.
- more than incidental to the performance of logistics services group always provide warehousing or storage services in addition to any logistics services and they must be services, often referred to as logistics services, related to the distribution of goods. Establishments in this earlier, the definition of 493 Warehousing and Storage states that warehouses may "provide a range of Warehousing and Support Services (NAICS Code 4931) are subject to the new use tax. As discussed
- We believe that logistics services provided incidental to a warehouse may be subject to taxation especially if there is no separation of the functions or separate company that does the work

## What is the Role of Location in the Application of the Services Tax?

- PA 93 requires every seller to source sales in accordance with Section 20 and collect the use tax from the consumer.
- Section 20): Under Section 20, for sourcing a sale subject to the use tax, the following applies (note that services set forth in the bill must be sourced as products as provided in
- sourced to that location. If a product is received by the purchaser at a business location of the seller, the sale is
- If a product is not received by the purchaser at a business location of the seller, the sale is sourced to the location where the product is received by the purchaser or the purchaser's designee, including the location indicated by instructions for delivery to the purchaser, known
- If either of the above provisions does not apply, the sale is sourced to the purchasers
- are also considerations These rules are important in determining whether a service is taxable and who is responsible. Good faith clause, object of function, beneficiary, where benefit received

# What are the Policies of Neighboring States Regarding SCM Services Taxes?

- No other Midwestern states tax courier services.
- Six states tax intrastate courier service at NM, WA). rates of .384 to 5.75 percent (AZ, DE, DC, HI,
- Only one state, Wyoming, taxes interstate courier service (Wyoming at 4%).
- Ohio taxes warehousing services as one element of a business tax but not a use

# What is the Magnitude of the Industry being Impacted and How will it likely Respond?

- Magnitude of warehousing, courier, and logistics consulting industry
- Awareness of proposed use tax
- Likely response

# What is the Magnitude of the Industry being Impacted and How will it likely Respond?

# Magnitude of the Industry

\$48.6	\$182.1	\$1,214.3	\$3,035.9	30,227	Total
\$8.1	\$30.5	\$203.5	\$508.9	3,843	Consulting
\$23.5	\$88.0	\$586.5	\$1,466.3	13,738	Warehousing
\$17.0	\$63.6	\$424.3	\$1,060.7	12,646	Couriers
Income Tax (\$M)	Use Tax (\$M)	Payroll (\$M)	Revenue (\$M)	Employees	

Source: Based on U.S. Census employment data

# Survey Characteristics

- Sample size 25 service providers
- Total revenue \$263 million annually
- Total employment 2,913
- Total payroll \$89 million annually

# Understanding of Use Tax

	Warehouse	Clients of
	Operators	Warehouse
Not aware of use tax related to PA	1.0	2.8
0093 2007		
Use tax doesn't apply	1.2	3.0
Do not understand the implications of use tax	1.6	2.9

Scale: 1=Strongly Disagree; 3=Neutral; 5=Strongly Agree

# Response to Use Tax

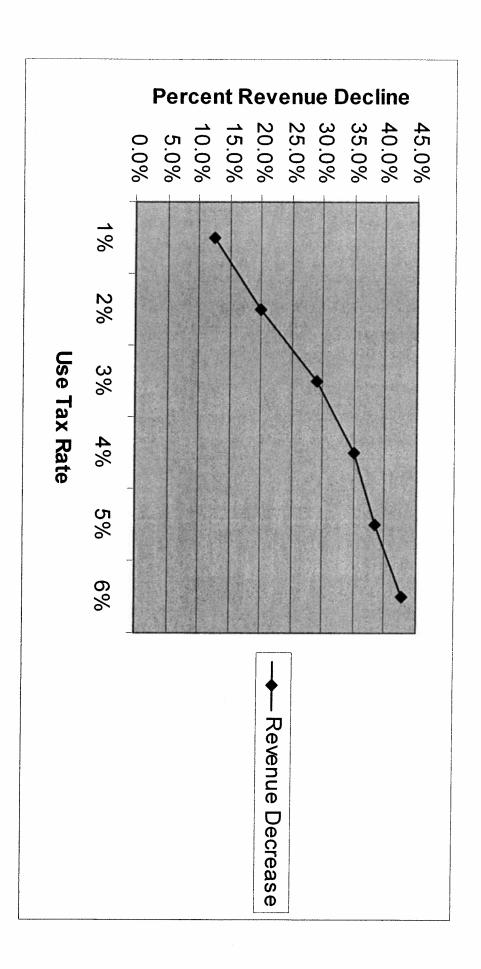
	Warehouse Operators	Clients of Warehouse Operators
Change operations in Michigan	4.0	4.6
Shift manufacturing outside of Michigan	<u>သ</u> သ	4.0
Shift warehousing/storage outside of Michigan	3.9	4.7
Shift supply chain value-added services outside of Michigan	4.7	4.8
Shift parcel transportation services outside of Michigan	3.5	4.4
Shift supply chain consulting services outside of Michigan	3.8	4.4

Scale: 1=Strongly Disagree; 3=Neutral; 5=Strongly Agree

# Assessment of Firm's Response

1.4	PA 0093 will have no impact on our firm's customers Michigan operations
1.8	PA 0093 will increase firm's willingness to invest in Michigan
1.4	PA 0093 will have no impact on firm's Michigan operations
Response	Item

Scale: 1=Strongly Disagree; 3=Neutral; 5=Strongly Agree



#### impact of Use Tax Rate on Warehousing Revenue

### Reduction in Business Activity? What is the Impact Based on

Use Tax (Based on 6% of revenue	Payroll loss (\$M) Income tax loss (\$M)	Job loss	Income taxes (\$M)	Payroll (\$M)	Revenue (\$M)	Employees	Reduced activity based on survey	
			49	1,214	3,036	30,227	Current Activity	
159	154 6	3,829	42	1,060	2,651	26,398	12.7%	1%
146	241 10	5,995	39	973	2,434	24,232	19.8%	2%
129	354 14	8,816	34	860	2,150	21,411	29.2%	3%
<del>1</del> 18	426 17	10,596	32	789	1,972	19,631	35.1%	4%
112	466 19	11,604	30	748	1,870	18,623	38.4%	5%
104	519 21	12,914	28	696	1,739	17,313	42.7%	6%

- "We will move as much business as possible to our other facility in Dayton, Ohio."
- "Warehousing is different than other services pickup your lawn or your hair and move it out of Michigan." such as lawn care or haircuts, because you can't
- "His \$10M business will leave MI if this tax takes
- "His business has lost money 6 years straight and this will end their commitment to doing business in Michigan."

- struggle in justifying to our customers the added freight costs to ship in and out of Michigan. Our "The preliminary impact is unknown at this point altogether." state, by geography, is not an ideal location for nationwide logistical operations. Adding a 6% shift storage to other states since we already reason for our customers to avoid Michigan cost to B2B storage will only add one more It is anticipated that our national accounts will
- "We expect a significant decrease in customers operating nationally."

- "I don't know why a business would choose to locate in
- "Its ridiculous that state passed this late night law without considering its real implications.
- "I am a Member of MI Economic Growth Assoc. working to bring Ohio jobs into Michigan, but this effort is a waste of time now."
- "Our supply chain doesn't have to be in MI, but we choose to be here because we have been loyal to our nome state
- "My company owns 3 million sq. ft. of warehouse space there will be a severe economic impact to the communities and school districts where we operate." in Ml. We pay \$1.5M in property taxes. When we leave,

- will force them there." "Our biggest concern is that our customers will leave us do business with Indiana service providers already, this and we won't be able to get new ones. From Spring Lake, it's often geographically closer for our customers to
- a tew." expensive. We all need to pitch in and not to put it on a "Two customers are already looking to move to Indiana. People want to move to Chicago if it is going to get more
- "We don't think it applies to us because most of our because we fear a Treasury audit two years from now will find that it does." customers are out of state but we will still probably leave

#### Conclusions

- While the warehouse operators understand the implications of the use tax, it appears that their
- outside of Michigan. services, consulting services, and courier services The warehouse operators will likely move value added customers and clients do not,
- warehousing/storage, transportation, consulting and manufacturing outside of Michigan. customers and clients will move value-added services, The warehouse operators believe strongly that their
- Strong indication that warehouse firms and their customers will sharply reduce Michigan operations
- A 6 percent use tax is estimated to reduce warehouse operating revenue by 45 percent. The revenue reduction decreases to 12 percent at a 1 percent use tax

# Services Tax Logistics Related Macro Impacts

- services/consulting and courier support that their out of state competitors don't pay. taxes on outsourced warehouse/logistics Michigan headquartered manufacturers/retailers will pay
- Some Michigan based firms may move out of state to avoid taxes, and cause other firms considering Michigan locations to stay away.
- disadvantaged because their suppliers using Michigan contract warehouses to support JIT shipping to the on to the Michigan retail chain. Retailers with Michigan DC's/stores will be retailer will be subject to the tax and will have to pass it
- Warehouse operators may relocate to Indiana and Ohio because warehouses located in those states are not subject to use taxes.
- these warehouse operators may also cease to exist even Transportation related services owned and operated by though they are not directly subject to the tax

# Services Tax Logistics Related Macro Impacts (Continued)

- Logistics value added services industry developing in Michigan may be forced to consider moving to out of state locations to avoid the use tax.
- Warehouse customer/clients will divert business to Indiana/Ohio based competitors who will not owe the tax
- Michigan's ability to capitalize on its position at the supply chain center of the U.S.-Canada corridor between Chicago-Detroit-Toronto-Montreal or with the Aerotropolis may be jeopardızed.
- volumes by courier are less likely to place manufacturing Manufacturers and retailers shipping/receiving large and distribution centers in Michigan
- arrangements that have been at the center of SCM strategies for many firms Use taxes are a disincentive to outsourcing

#### Services Tax

# Logistics Related Macro Impacts (Continued)

- and inefficiencies due to reduced economies of scale. resulting productivity benefits driving greater insourcing Use taxes reduce the potential for specialization and the
- 42 percent disincentive payroll service does work for Fed Ex at 6 percent, Fed Ex invoices Ryder Integrated Logistics for a service for an auto company with a 6 percent use tax, Ryder another 6 percent, and then the 4PL invoices the auto Since supply chain activities are highly outsourced to a company for another 6 percent. The pyramid result is a invoices a fourth party logistics services provider with extensive pyramiding of use taxes. For instance, a variety of specialists these supply chains are subject to
- state providers will be at a disadvantage just like in-state of state "logistics services" and consulting providers, inpayment of the tax by Michigan beneficiaries or their out Overall, unless Michigan Treasury strongly enforces the warehousers are